

CARIBOU, SEPT. 6, 1893.

No mills on the Aroostook at Caribou. All located on Caribou stream, in the village, namely, two. One E. P. Grimes, one S. W. Collins & Son.

E. P. Grimes, lowest, water shingle mill, with two machines (Mr. Grimes only has an interest in it). Cuts annually from 1,500,000 to 2,000,000 shingles. All the refuse goes into stream.

S. W. Collins & Sons, upper, 1 rotary, 1 lath, 1 clapboard sawer and planer. Two shingle machines. Cuts annually about

1,000,000 ft. long lumber,
1,000,000 laths,
6,000,000 shingles.

Water mill, all waste goes into stream.

There is only one other mill on this stream, about one mile above the village. Cuts shingles. E. P. Grimes has an interest in it. Cuts yearly about 1,500,000 to 2,000,000 shingles. Water mill. All waste goes into river.

There is one mill between Caribou and Presque Isle, on the Aroostook.

There are two mills on the Aroostook between Caribou and Fort Fairfield on the south side of river (Thos. Taylor & Son and Stevens), and one

on the north side.(E. P. Grimes)

Grimes' mill is at the mouth of the Little Madawaska. Water, dam, no fishway. Has rotary, and six shingle machines, but never uses more than five. Cuts yearly about:

1,000,000 ft. long lumber,
4 to 5,000,000 shingles.
All waste goes into stream.

A dam was put across the Aroostook River about years ago by a corporation which has been purchased by Alba Holmes, of Caribou. It now runs only the Electric Lighting Machinery for Caribou and Ft. Fairfield, and the water works for Caribou. It is located about $\frac{3}{8}$ of a mile above the bridge. The water for Caribou is taken just above the dam and is filtered. This is the only dam across the main Aroostook. It controls a very important water privilege, which could run several factories, and it is expected that it will be leased. It is a broad apron dam, reaching entirely across the river. No permanent fishway was placed in it until this summer. Hitherto temporary ways were built every spring, and were mostly carried away the next winter. They were on the south end of the dam, a straight ladder on top of the apron. They were not well

suitied to the purpose. Some fish went up them every year, however, excepting the last, when there seemed to be something the matter with it. The present way has been built in accordance with plans furnished by the State Fish Commissioner, and has recently been inspected by Mr. Buck. It is set into the north end of the dam close by the water works house, and seems to be properly planned and constructed, although the flow of water is controlled by two gates above, like those in the Princeton way, and may be closed at any time. It has two turns, always descending. That is, there is not a level landing at each turn. A regular ladder; partitions straight from the sides, with openings alternating. Deep and wide. There was plenty of water running through when we saw it. State could furnish plans.

The dam is 14 feet high from the level of the water below to crest of dam at this season. In the spring there is a depth of four to five feet of water going over dam, and the level is higher below. There was a thin sheet flowing over today its entire length. The water banks back 4 or 5 miles from the dam, and the river is here made

wider than below. The water is deep at the lower edge of the apron, probably nearly ten feet.

E. E. Douglas, one of the workmen at the waterworks, said that during the summer of 1892(July and August) salmon were constantly jumping just below the dam. They were very abundant, and some were seen to go up the temporary ladder. They came up to the mouth of the sluice below their wheel, and they could plainly be seen from their wharf.

Mr. S. L. White, druggist, says that until this dam was built the people about Caribou had not noticed specially that salmon were running up the stream in any numbers. Their attention was first attracted to their jumping at the dam, and since then much more attention has been paid to them, and there has been some sport fishing. Have been growing more common since then and have been most abundant this year.

He never heard of salmon going up the Caribou stream, but he has been here only six years. Has hatched trout, landlocked salmon, and sea salmon eggs, obtained from Maine and United States,

here in Caribou, for planting in this region, largely in the Little Madawaska. They propose building a hatchery with growing ponds below Caribou, where they can rear fish until fall.

Madawaska stream and lake are excellent for trout; salmon have also been seen in that stream. He has planted landlocked salmon in that lake.

B. L. Briggs. Water Co.'s dam is the only one on the Aroostook. There are four dams on Caribou Stream.

1. The lowest is at Grime's shingle mill.
2. Grist mill of H. A. Edwards & Bros. and planing mill.
3. S. W. Collins & Son's saw mill.
4. Robinson Bros. shingle mill, about $\frac{3}{4}$ mile up stream. (Have spoken of this before as partly owned by Grimes).

No dams above the last on the main Caribou, but some on the small side streams. This used to be a great trout stream, now has scarcely any trout. Has been damed for 50 years or more, and none of the dams have ever had fishways.

On the Madawaska stream the lower dam is about one mile up from mouth; has a water long lum-

ber and shingle mill. Does quite a business. All waste goes into the water. ~~The second~~ dam is two or three miles above this. There was a saw mill here, but it was burnt two or three years ago.

There is a shingle mill on Halfway Brook in Plantation K. Saws shingles and long lumber, but not much of its refuse gets into the Madawaska.

None of these dams have fishways. All of the mills throw their waste into the stream, and a great deal of rubbish is to be seen below all the mills, but the condition of the stream is not as bad as that of Caribou. It is larger. McClusky Brook, which comes into the Madawaska above Halfway Brook, six or seven miles further, has a small shingle mill, but it was not in operation this year.

Does not know that the pumice from starch factories does any harm to fishes. It is dirty looking stuff, and very frothy on the surface of the water. It runs entirely out of the Caribou into the Aroostook. Has seen it on the bottom in the latter below Caribou stream, several feet deep. Has heard that larger trout are being caught in the Big Presque Isle River in Maine since many starch factories were established there, and it has been

considered there to be due to the pumice.

In the water works dam, the first temporary fishway was added ~~in~~ the second year of the dam, or three years ago. Salmon have been seen above the latter every year since.

Couldn't say where the spawning grounds of the salmon are. See the young, eight or nine inches long, very commonly in the river. Have been seen in many places up and down the stream.

Much poaching is down between the water works dam and Arostook falls, more especially in the upper part of this distance. Heard that one man took forty this season during one night.

Mr. Oakes, of S. W. Collins & Son, (Bro. of Charles Oakes), Most poaching is done between Caribou and Ft. Fairfield. There are many lawless fellows on that part of the river, who have always fished, and declare they always will, as they pleased. Have not been very strict hitherto in enforcing the laws, but now they have taken the matter up and propose to test it. Several have been indicted and will be tried this fall (before a jury in Houlton). The people here are mostly against the enforcement of the fish laws, and the few who

have taken the matter up encounter many difficulties, but their numbers are increasing, and they hope before long to educate the people, that the protection of the fishes is being made in their own interests.

The river Aroostook freezes over very thickly. May have two feet of ice, and a great deal has to go down in the spring.

The young salmon are very common in the river above and below the dam.

Mr. Oakes said it would entail much expense upon the mill owners to dispose properly of their refuse, but he thought it should be done, and was certain they must come to it sooner or later.

E. P. Grimes, mill owner. Would regret exceedingly if he were obliged to take care of his waste. It would increase greatly the cost of running his mill; would increase his fire risk also, in building furnaces, or in working an open fire dump. He acknowledged that the present method of dumping everything was deplorable, and should justly be stopped. Has some trouble from refuse above coming down to his mill, but it costs him much less

to handle it than to burn.

A workman on the logs at mill of S. W.

Collins & Son, Caribou, told us that the pumice from the starch mill above sometimes covered much of the surface of their pond, and went down over the dam. It of course gave them no trouble, and he could say nothing about its effect on fishes.

The Arostook falls are so low that they make no obstruction to the ascent of salmon, as may be judged from the remarks made above. There are good fishing places about the falls.

Examined the Caribou stream from its mouth to the upper part of the town. It is in a very sad condition, not unlike that at Calais, but on a smaller scale, and with the added element of shingle waste, and other waste than sawdust from long lumber. The channel is packed with sawdust, edgings, etc., and shingle waste. It has the elements of a pretty stream, rough rocky channel, rather steep banks in the lower part, with pools, etc., which must have made it an excellent trout stream, and salmon should also have gone up.

There are three impassible dams in the

town of Caribou, with no fishways, but in the spring they may not look so formidable. There is now very little water in the stream. The sawdust, edgings, shingle waste, etc. was uncovered everywhere, the sawdust forming thick beds and filling in everything.

We went up only as far as the log pool at Collins' dam, where the shores of the stream are low. On the shores of this pool there is a starch factory. Several others and a planing mill occur below to the mouth. Also some old tumble down structures, and the appearance of the stream here is not good in any respect.

ON THE WAY UP THE ST. JOHN, IN THE MORNING, FROM
WOODSTOCK, N. B., TO PRESQUE ISLE, ON
THE AROSTOOK--SEPT. 6, 1893.

Beechwood, N. B. Small water mill on a
little stream flowing into the St. John River (east
side). About 100 yards above mouth of stream.
Sawing long lumber and shingles. Was throwing all
its refuse into the stream.

About 15 miles below Aroostook Junction,
on the west side of the St. John River, is a saw mill
doing considerable business. Shingles were among
its products. There were large quantities of shin-
gle drift at the mill, and all along the St. John
below it for several miles. This stuff was strand-
ed from place to place on the rocky ledges in the
channel, and was very conspicuous from the car win-
dows. It stopped after we passed this mill. There
seemed to be a stream flowing in here, and a clus-
ter of several buildings located in a depression of
the high bank.

There is a small mill on the north side
of the Aroostook River just above Aroostook Junction
(It was in N.B.), which was throwing out a large
quantity of shingle waste.

There was a boom just below the boundary

line, against which had collected many shingle butts and cores and other refuse of the same kind. Shingle waste is very abundant all along the shores of the Aroostook as far up as Caribou, but the river was comparatively clean above this place as seen from the train.

Little booms are run out from the shore at frequent intervals in places to catch the shingle waste, which is hauled away by the people along the river, as firewood.

PRESQUE ISLE, AROSTOOK RIVER

(1))

SEPT. 6, 1893.

Presque Isle is in the P. I. branch of Aroostook.

Amasa Howe, P. M., has been in Presque Isle 32 years. Has done much fishing. Salmon have never gone up this branch since he has been here so far as he knows. The dam was here when he came and has been here ever since. It is high and probable cause of their not coming up, as the river is good in this region. Friends of his about two weeks ago caught a number of salmon at the mouth of the Millnocket, where it empties into the main Aroostook. They said salmon were very abundant there. They saw many of them. Fry have been planted in the Presque Isle Branch.

There is a dam just below the bridge in the village. It is about 10 feet now from the water below the crest. No fishway; has been here over 33 years(A. Howe), and is a complete barrier to salmon.

There is a mill directly by the side of this dam and makes use of it. A. R. Gould & Co. 1 rotary, 1 lath, 1 shingle machine, clapboard machine and planer.

Cut annually about

4,000,000 ft. long lumber,
4,000,000 laths,
3,000,000 shingles.

Runs with water, except at times when water gets too low. Then uses steam. The boiler is in an adjoining small building, and also runs electric light. Burn sawdust in the furnace, which is going all the year. A large portion of the sawdust, however, goes through floor into stream. The lath edgings are hauled away for fuel, but some go into stream. All the shingle waste goes into stream, no pains being taken to save it. In winter, however, when the stream is frozen over, they haul most of it away.

There is another small shingle mill owned by John Wilson & Son, on the opposite side of the river from the main part of the town. It is run by steam; contains 1 shingle machine, planer and molder. They burn their refuse, we were told. We had no time to examine it, but saw no refuse from it in stream.

The dam and bridge in the village are about 1 mile above the mouth of the Presque Isle Branch.

There is another mill, owned by Stewart & Martin, in Mapleton, on the north branch of the

Presque Isle stream, about six miles, by road, from Presque Isle. It is a water mill, with dam and no fishway. Contains rotary, lath machine and shingle machine. Has about $\frac{1}{3}$ the capacity of Gould's mill. All of the waste is run into the stream. We saw some shingle drift at Gould's mill, which was said to have come from this mill.

We were assured that there were no other shingle mills than the above on the Presque Isle branch.

We noticed comparatively little drift in the Aroostook between Caribou and the mouth of the Presque Isle branch.